

Water Quality Work Group Meeting

August 10, 2021

Location: Zoom (online only)

Minutes

Attendees: Marco Alebus (NJDEP), Brett Branco (Brooklyn College/SRIJB, NY co-chair), Rob Buchanan (NYC Water Trail Association/BOP, CAC), Elizabeth Butler (EPA), Lisa Congiu (NJDEP, NJ co-chair), Chris Daggett (HRF), Rosana Da Silva (HEP), Mick DeGraeve (NJHDG/GLEC), Jason Fagel (NYSDEC), Brent Gaylord (EPA), Emma Gildesgame (NEIWPCC), Roop Guha (NJDEP), Wayne Jackson (EPA), Lingard Knutson (EPA), Jon Kramer (HRF), Tom Laustsen (PVSC/NJHDG), Alyssa Le (ICF), Amanda Levy (NYCDOHMH), Jim Lodge (HRF), Keith Mahoney (NYCDEP), Rosella O'Conner (EPA), Rob Pirani (HEP), Isabelle Stinnette (HEP), Shino Tanikawa (NYCSWCD, CAC), and Judy Weis (Rutgers, STAC)

Next Meeting: Tuesday, November 9, 2021

1) Overview of Agenda, Introductions, and Minutes Approval

Lisa Congiu opened the meeting and provided an overview of the agenda and introduced the May minutes. Minutes were motioned for approval by Mick DeGraeve and seconded by Jim Lodge.

2) Economic Analysis of the NY-NJ Harbor Estuary

Rob Pirani welcomed Emma Gildesgame and her colleagues from ICF who have been advancing this very important project. HEP is grateful to the EPA for providing the funding to NEIWPCC. We will get a great outline about the economic benefits of clean water for additional research avenues, ways to think about the benefits of clean water, and how we communicate about clean water in the region. Emma Gildesgame discussed that last year, NEIWPCC has been working with HEP and several project partners to identify the question we are asking and how we can answer them. An environmental economist was hired to help conduct a literature review to aid in the selection of an economic methodology for this project. As of 2021, ICF has been working on the project, received a recently approved QAPP, and are currently working on reviewing the data from the Harbor-Wide Water Quality Report. This effort will ultimately build upon all the work that this Work Group has completed in the water quality report. We are focused on communicating the importance of the Harbor Estuary to the regional and national economy. Feedback received focused on the economic benefits of clean water and water quality improvements and we will be looking at *Enterococcus*, dissolved oxygen, and total nitrogen as the key parameters.

Mick DeGraeve noted significant improvements to the Harbor, but asked if this study would solely focus on the Harbor or the individual waterways. Emma clarified that the study will also look at the ten regions identified in the Harbor-Wide Water Quality Report and the entire Harbor Estuary to understand the economic benefits. Today's focus is on identifying the scenarios for the analysis, and again the goal is to communicate the importance of the estuary and its economic benefits but also set the stage for the research needs. Brett Branco asked for more explanation of the economic valuation method being applied. Emma clarified the benefit transfer model takes studies from somewhere else (for example known clean water impacts to fisheries in the Chesapeake Bay) and enters it into a database to generate

a direct relationship of environmental improvements and economic value. This database will be used to compare local conditions of the Harbor Estuary. Shino Tanikawa noted that water quality data is not static and also not 100% in compliance, how will the project team deal with that aspect of the data not meeting standards and the economic value? Emma believes that there are methods to deal with uncertainty in the non-static data, but the team will also be looking at time series data. Alyssa Le noted that they likely will be averaging an 8-year time frame to establish a baseline value and the model does look at how that data changes in comparison to the economic analysis. Rob Buchanan asked regarding the aesthetics and whether this project will look at or make a statement towards the increased real-estate value along the waterfront? Emma indicated the public-facing report will clarify what we studied, what we didn't, and what other studies are needed. Rob Pirani also added that unlike other studies, we won't come up with a value of the estuary, but rather the value of clean water and what the return on investments for clean water would be for our region.

Emma introduced the analytic scenarios that will be based on the estimated changes in economic value which could include meeting water quality, implementation activities, and anything else we would be interested in. Emma asked the group what water quality goals do we want to highlight? Majority voted aquatic life and primary contact recreation as key goals to highlight.

In discussing **aquatic life**, the majority of the work group identified Dissolved Oxygen as a key parameter. Roop Guha added that in terms of aquatic life, total nitrogen is the cause and dissolved oxygen is the effect. Shino Tanikawa added microplastics and Judy Weis suggested biodiversity. Emma and Alyssa clarified that these parameters including the type of change we're interested in must be information that we have, not areas that are unknown. Emma then asked what type of change would be most of interest. Shino indicated an interest in changing the number of days the standards are met and that this could be in percent improvements. Brent Gaylord indicated that all three options would be quite important. Lingard Knuston added that population increase or at the least less fish kills would be of interest and Rob Buchanan added the increase in commercial or sport fishing catch/revenues as another option. Mick DeGraeve added that there is lots of information on specific fish species – striped bass, Atlantic menhaden, and sturgeon were mentioned. Isabelle Stinnette indicated that we likely cannot say that dissolved oxygen is the limiting factor in aquatic life. Roop Guha added that temporal and spatial attainment of standards as well as expected-modeled changes due to proposed/planned activities for dissolved oxygen may be difficult to reduce to one number if using EPA's recommended criteria. Judy Weis noted dissolved oxygen is certainly very important, but cautioned the use of a simple model for the complicated environment. Elizabeth Butler suggested that if there are only five scenarios that can be completed, it may make more sense to do more than one change under an aquatic life scenario.

Alyssa indicated that we can use the specific values from the Harbor-Wide WQ Report and can say we want to change DO by a certain percentage by a specific action or that we want to meet a DO value, each are tangible actions. The proposed and planned activities would need to be something known. Mick indicated that if that is the case, then the way in which that region meets the standards for aquatic life may be better. Roop spoke on the difference in standards for the shared waters and whether we should be using EPA's recommended criteria as the goal or if we want to look at existing use based on the existing state standards? Upon using EPA's criteria, modeling can become more complex and perhaps it is a range and a duration curve where discrete data, looking at above or below the curve, may not be an appropriate comparison. Brent Gaylord asked if the analytic scenarios are going to be based on the state's standards? Emma suggested for the shared waters, they will take the same approach taken in the Harbor-Wide Water Quality Report where the stricter standard would be used. Brent asked why we wouldn't use EPA's 304(a)

criteria when the state's standards are below? In looking at the overall project goals around clean water, while the waterbodies are different there are set targets that we want to achieve in terms of clean water, regardless of the UAA and other existing uses. Emma indicated that this is a key question that the team will be looking at.

In discussing **Primary Contact Recreation**, overall interest was on *Enterococcus* parameters. Rob Pirani asked whether there have been any economic studies in the LTCPs in connection with their expected water quality goals. Keith Mahoney indicated that the LTCP looked at the cost to comply with meeting the criteria, but did not look at how the clean water would impact, for example, property values. Keith anticipates that aesthetics would be the real drivers for increase in real-estate, such as floatables, oils, fish kills, and odors. Brent Gaylord suggested meeting EPA's 304(a) recommended 2012 Recreational Water Quality Criteria. Shino Tanikawa added that this scenario would be important to focus on in Newtown Creek, Gowanus Canal, Harlem River, Passaic River, Bronx River, and a few others. Rob Buchanan added that comprehensible modeling and improved notification programs would add more value. Roop Guha added we need to see the temporal data and not just the center channel discrete data. This will be difficult to get as wet weather data is difficult and dangerous to get in CSO waters. Roop emphasized that if the change/metric is focused on "meeting standards," the project must keep in mind that criteria are not just number thresholds, but also account for duration and frequency of exceedance.

Emma thanked the work group and can be reached at egildesgame@neiwpcc.org if anyone has any follow up questions. The results will be shared later this year. Rosana Da Silva indicated that there are a few seats available to serve on the project's Advisory Committee.

Action: Any work group member interested in participating in additional meetings and serving on the project's Advisory Committee should email Rosana with their interest at rosana@hudsonriver.org.

3) Moving Forward on Water Quality

Rosana Da Silva recapped the discussions held at the last Policy Committee meeting to address the challenge identified in the 2019 Program Evaluation letter as well as the Action Agenda's WQ-A-2 action that focuses on shared standards. A proposed revision of the A-2, work group activity plan, and a tentative approval schedule was shared. Mick DeGraeve asked if this effort is directed at attempting to get to identical water quality standards between the two states. Rosana indicated that as currently written, that is exactly what A-2 is trying to achieve, and while the Policy Committee has been working on a revision, we want to provide support to the states and EPA in moving forward shared standards. Judy Weis indicated that from the previous meeting, she understood that the states and EPA did not want to advance this and we should work on something else. Rob Pirani clarified that it was our understanding that the states and EPA are supportive of us convening discussions, doing the technical work that would help inform their decisions. Where the states and EPA drew a 'line' is HEP is not in charge of the discussion or the decision. Our charge today, from a technical level, is what can we do and what would be useful. Mick added that the work group in the past did try to achieve this effort over a decade ago and is hopeful that we are in a better position to advance. Rob noted the concern was also raised during the Policy Committee as to whether the same standards were worth the effort. The Policy Committee is looking towards the Water Quality Work Group for contributing to the topic. Roop Guha agreed.

Rosana provided an overview of the potential tasks that were generated from the May meeting and launched a poll for the work group to rank the most important activity that would help the states/EPA in advancing. Rob Buchanan asked where is the ‘near shore’ pathogen data coming from and that he gathered the citizen science efforts would not be used. Rosana indicated this can be further discussed in the near shore comparison study. Roop Guha added that for future consideration the evaluation of innovative bacterial monitoring techniques should be added. Marco Alebus indicated that as part of the ongoing CSO LTCP work, NJ CSO permittees have recalibrated/validated the Harbor Estuary Pathogen model (SWEM); this model can be used in the effort to better coordinate the WQ standards in the shared waters. Given that both states are finalizing their CSO LTCPs, it is appropriate time to run the model for the entire harbor using the final recommended LTCPs.

The highest ranked activity selected by members was to “review current standards and state’s communications to identify joint-communication strategies.” Brett Branco indicated from the May meeting, the target audience would be the general public to help navigate/interpret what comes out monitoring programs. Not just risk, but what the standards mean plainly for the public to understand. Shino Tanikawa added the general public is important, but also the next level water quality advocates for an explanation of why the states have different standards for the same waterbody. For example, primary contact is a designated use on one side of a shared water. Shino suggested if you can’t standardize the standards, at least explain why it exists, clearly communicate the differences between standards, what it means for users as well as improvements that are underway across the region. Jason Fagel indicated that he was not aware of any work around this, but that communication would be helpful. A third party, like HEP, would be helpful as NY would never speak on how someone should interpret NJ standards and vice versa.

Judy Weis asked if there are other estuaries with shared waters and different water quality criteria. Brent Gaylord answered yes, for example the Delaware, but they also have a commission that plays a unique role. Roop Guha added the mainstem of the Delaware follows the standards that commission uses, but there are areas where you do have different standards between Pennsylvania and Delaware. When communicating, typically the more stringent of the standards are used. Lingard Knutson added she believes NY and CT have different standards in the LIS and Jason Fagel confirmed that they are different in LIS, but that he would need to look how those differences are handled. Chris Daggett indicated that he personally believes that it would be great to achieve an agreement on shared standards as it would make a lot of sense, though if we cannot do this, he agreed that communicating clearly why we don’t and what that means is important. Roop Guha added that in regards to shared standards, NJDEP does take stakeholder comments sincerely and are looking forward to how we can work together to achieve this goal.

Action: HEP to consolidate information and draft a workplan for the WQWG to accomplish this work. WQWG members to provide comments or input in response to the Policy Committee’s memo in response to action WQ-A-2.

4) Waterway Stories

Rosana Da Silva briefly updated the release of the Harbor-Wide Water Quality Report. The waterway stories are a means to build upon the report and picking up from our February meeting, Rosana met with the Public Access Work Group to receive feedback. Their recommendations are to continue on an online platform, whether a StoryMap, app, or website, and suggested not to focus on the data as water quality data is in continuous flux. The Public Access Work Group also recommended clearly identifying the target

audience and working with partners to curate stories. Rosana will be presenting at the next CAC and Hudson-Harbor Educators Work Group for additional feedback. In addition, Rosana shared that the 2021 HEP conference will also be focused on waterway stories, public access, and communications where we are looking to collect/display these stories.

5) Partner Updates

Brett Branco shared that the Hudson River Park Trust comments closed on Monday and that there were a number of water quality focused efforts this work group should keep an eye on for an opportunity to partner.

Isabelle Stinnette shared the Restoration Work Group has been working on updating the CRP map to improve mobility in the site as well as updating site information. Regarding water quality, there is a TEC for closed and confined waterways that the WQWG may be interested in reviewing. Isabelle is looking for beta testers to understand what is working or not on the website as well as any additional information folks may have about a particular site, please do share that with Isabelle.

Rob Pirani and Isabelle Stinnette shared that HEP's conference will likely occur the 2nd or 3rd week in November and that our theme will be waterway stories, water quality, public access, and communications. We will be sending out an RfP to collect greater voices and stories around the estuary that can include fishing, swimming, research, etc. which could be part of a rapid 5-minute video or panel discussions or other format to build upon the work group's effort of waterway stories.